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# EFFECTIVE EDUCATION FOR CHILDREN WITH AUTISTIC SPECTRUM DISORDER: PERCEPTIONS OF PARENTS AND PROFESSIONALS

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There are various views among academics and researchers about the best type of educational provision for children with Autistic Spectrum Disorder. In the present study parents and professionals were interviewed to get a better insight into their perceptions regarding the various educational provisions on the specialist to mainstream continuum. Parents seem to be of the view that whatever the educational provision, teachers should have adequate autism-specific training. If all teachers were trained in this way, parents see advantage in the child being in mainstream settings. More importantly, whatever the provision, the quality of delivery, staff attitude and curriculum modification play an important part in creating an inclusive environment.

The transition from primary school to secondary school is a crucial period of time during which many of the most important decisions about whether children with special needs should be educated in segregated or more inclusive contexts are made. However, there has been an on-going debate about which provision is best. Sociological critiques of special education have suggested that the education system can have the effect of creating disabilities rather than remediating them (Skirtic, 1991; Barton, 1988). The effectiveness of investment in a separate system of special education has also been questioned on the basis that it has not produced sufficient long-term positive outcomes for people with disabilities (Audit Commission, 1992; cited in Florian, 1998).

Arguments like these, together with the human rights agenda, have resulted in promotion of the concept of full inclusion, which involves all children with special educational needs being educated in mainstream schools (Hornby, 1999). However, it has been argued that calls for inclusive education are not supported by empirical evidence. For example, a review by Farrell (1997) found that the available evidence was inconclusive. Hegarty (1993) also reviewed the academic and social benefits of integration and found no clear-cut advantage for mainstream education. Feiler and Gibson (1999) also note that there is no evidence that teachers are uniformly convinced that education for all in mainstream settings is appropriate. Sebba and Ainscow (1996) acknowledge that much of the drive towards inclusive schooling has been due to ideological convictions and that debates are often carried out at a philosophical or sociological level, while research on practical curricular organisation for children with severe difficulties is very limited.

In a review of literature on inclusion of children with autism, Mesibov and Shea (1996) note that literature in this area is limited and that it provides an insufficient foundation for empirically based decisions about the benefits of full inclusion for children with autism. However, on the basis of the limited data available, these authors suggest that the benefits of inclusion for this group may be more limited than for other children with special needs. They note that although, as a group, children with Autistic Spectrum Disorder (ASD) share many characteristics with each other, they can also be extraordinarily different from each other and from other children with special educational needs. They argue that, because of their particular pattern of difficulties in responding to verbal instructions, social modelling and social rewards, some children with ASD are not responsive to mainstream teaching techniques. Mesibov and Shea (1996) also highlight a possible paradox in that mainstream environments may generate pressures for children with ASD to fit in, which could inadvertently foster increased dependence.

Barnard, Prior and Potter (2000) argued that inclusion of children with ASD is not simply about where an individual is educated or receives support but is also about the quality of the service or support. They argued that *inclusive* education should involve restructuring of the curriculum and classroom organisation, which distinguishes it from *integration* that focuses on an individual, who has to adapt to what the school has to offer. However, these authors asserted that some children with ASD are best served by discrete specialised services. They reported a survey which showed that parental satisfaction with their child's education was highest when there was provision of autism specific support, whether in mainstream, autism support units attached to mainstream schools or in autism specific schools. They thus, indicated that a range of provision is needed if individual needs are to be met and that it will require cooperation and collaboration between mainstream providers and specialist autism providers.

However, Smith and Brown (2000) have argued that an autism friendly environment can be created in any educational context, provided a number of key elements are present including: the physical environment; the curriculum; staff skills; parental involvement and multi-agency work. They argue that this has important implications for teaching staff in the areas of communication, assessment and intervention, and teamwork/management skills; and especially the attitudes, values and knowledge base of staff. They also call for parents to be involved in joint assessment of the child's needs and in planning the child's education programme.

As there are such varied views among academics and researchers about what type of educational provision works best for children with ASD, in the present study parents and professionals were interviewed to get a better insight into their perceptions regarding these issues.

## Research questions

- 1. What are the parents' and professionals' perceptions regarding the various provisions on the specialist to mainstream continuum?
- 2. What are their perceptions regarding the support made available in a range of educational provisions?
- 3. What are their perceptions regarding what works within these educational provisions?

# Method

Sampling

A sample of parents of 5 children with ASD making transition from Primary to Secondary Education was chosen (Table 1 gives details of the nature of these transitions; note that pupils transfer to secondary school a year later in Scotland than England). Professionals working with, or about to work with, these children were sampled to provide their insights in relation to the

provision for these five children, and to provide insights from their work with other children. All five children were male in the age group of 12 to 13 years. Four were diagnosed with Asperger's Syndrome and one with Autistic Spectrum Disorder.

Table 1
The current and future educational provision for the five children

| Case 1 | Autistic Spectrum<br>Disorder | Mainstream Primary  ⇒  Mainstream Secondary                                 |
|--------|-------------------------------|---|
| Case 2 | Asperger's Syndrome           | Mainstream primary  ⇒ Secondary communication support unit                  |
| Case 3 | Asperger's Syndrome           | Primary communication support unit  ⇒ Secondary communication support unit  |
| Case 4 | Asperger's Syndrome           | Primary communication support unit  ⇒ Autism specific day provision         |
| Case 5 | Asperger's Syndrome           | Primary communication support unit  ⇒ Autism specific residential provision |

#### Instrumentation

Parents and professionals were interviewed. The core content of the interview schedules was derived from key issues identified in the previous literature and the current research questions, adapted to create a differentiated interview schedule for each type of respondent containing both relatively closed and open elements. Solution focused approaches (De Jong & Berg, 2002; Wagner & Gillies, 2001) informed the construction and use of the interview schedules employed in the study. In particular, solution focused scaling was used to elicit the perceptions of participants in terms of where they placed themselves on key bipolar constructs related to the educational provision for children with ASD.

Draft interview schedules were piloted with a set of stakeholders for a child who had special educational needs associated primarily with physical impairment but with some autistic features (who was also about to make the transition from primary to secondary school), and revised accordingly. The complete set of interview schedules is available on request from the authors. *Data Analysis* 

Emerging themes were identified, and then all responses subjected to systematic content analysis using those themes, as advocated by Weber (1990). Results are given in textual and numerical form, the latter including descriptive statistics where appropriate.

## Results

Perceptions regarding the various provisions on the specialist to mainstream continuum Stakeholders were asked to place relevant educational provisions on a ten-point continuum from highly specialist (1) to mainstream (10) and then indicate the direction in which it would be most appropriate for the child to move (Table 2). Stakeholders were then asked what would need to be

Table 2
Stakeholders rating and perceptions of the various provisions on the continuum:

Specialist placement 1 2 3 4 5 6 7 8 9 10 Mainstream placement

| Specialist placement 1 2 3 4 5 6 7 8 9 10 Mainstream placement       |   |  |
|--|---|--|
| Stakeholder placement ratings  | What needs to be adjusted   |  |
| (1-10)   |   |  |
| Mainstream primary   | <b>Psychologist:</b> success / failure depends on supports such as                                    |  |
| Mean = $9.00$ , N = $4$ , SD = $1.41$                                | SEN auxiliary and school based learning support.  |  |
| Modal direction of preferred change =                                | <b>Teacher:</b> we could improve on supports if more resources  |  |
| status quo   | were available. The current ratio of 1:30 is quite high when  |  |
|  | dealing with children with special needs.   |  |
| Mainstream secondary   | Parent: would prefer more one-to-one work from teachers   |  |
| Mean = $9.50$ , N = $2$ , SD = $0.70$                                | and speech and language therapist.  |  |
| Modal direction of preferred change =                                | <b>Teacher:</b> we have highly skilled teachers and they will get                                     |  |
| towards mainstream   | information about this child.   |  |
| Primary communication support unit                                   | Parent: the child found going into the mainstream classes   |  |
| Mean = $1.00$ , N = 1, S D = Not Applicable                          | very difficult.   |  |
| Modal direction of preferred change =                                | <b>Teacher:</b> the child is unable to access mainstream and so                                       |  |
| status quo   | should stay in the support unit.  |  |
| Secondary communication support unit                                 | Parent: should not need support units, my child could   |  |
| Mean = $3.66$ , N = $6.00$ , S D = $1.97$                            | function in mainstream unaided if the teachers (in  |  |
| Modal direction of preferred change =                                | mainstream) were trained to understand children with  |  |
| status quo   | Asperger's better.  |  |
|  | <b>Psychologist:</b> the supported place in the unit works well, it                                   |  |
|  | allows access to mainstream but also provides support when  |  |
|  | things are difficult.   |  |
|  | <b>Teacher:</b> we need a clearer inclusion policy for our children                                   |  |
|  | when they go into the mainstream school to which the  |  |
|  | communication unit is attached. We also need to expand our  |  |
|  | outreach service so that it can reach more children in more   |  |
|  | mainstream schools not just the one to which the  |  |
|  | communication unit is attached.   |  |
|  | Speech and Language Therapist: mainstream may not be  |  |
|  | best, it may only encourage them to fit in rather give more   |  |
|  | useful preparation for life that would help them understand   |  |
| 1  | their difficulties.   |  |
| Autism specific day provision  | Parent: the child is well placed where he is at the moment  |  |
| Mean = 1.00, N = 1, S D = Not Applicable                             | but we should be sensitive to his changing needs as he  |  |
| Modal direction of preferred change =                                | develops.   |  |
| status quo   | Dononts my shild needs social shills twaining which is here   |  |
| Autism specific residential provision                                | <b>Parent:</b> my child needs social skills training which is best done in a residential environment. |  |
| Mean = 1.00, N = 3, S D = 0<br>Modal direction of preferred change = | Teacher: we will work with the child and his family to  |  |
|  | I   |  |
| status quo   | assess the potential for him to return to a more mainstream   |  |
|  | placement in the future.  |  |

adjusted to move them one point up the scale in their preferred direction.

Stakeholders placed autism specific placements and mainstream schools firmly and unequivocally on the opposite extremes of a specialist to mainstream continuum. Although stakeholders placed the secondary communication support unit provision near the middle of the continuum, the primary communication support unit provision was placed at the extremely specialist end of the continuum. However, it must be acknowledged that, due to limitations of the questionnaire, only one stakeholder continuum placing was available for the primary communication support unit.

The rationale for this particular placing, revealed through solution focused questioning, was that the child in question had no contact with his mainstream peers other than in the dining hall. Therefore, in the perception of the teacher for this child the provision represented locational integration only, rather than inclusion in any full sense of the construct.

In contrast, the placing of the secondary communication support unit towards the middle of the specialist-mainstream continuum seems to be based on the rationale that the main purpose of that provision was to support the child in accessing his main placement in the mainstream school. This apparent disparity is congruent with Jordan and Jones (1997) findings that there are significant differences between autism support units with regard to the relative emphasis given to creating opportunities for contact with mainstream peers as opposed to providing highly specialist and protective environment to meet their educational needs directly.

In solution focused questioning, the parent of one child in the secondary communication support unit indicated that she felt the communication support unit should not be necessary, and that her child could function in mainstream unaided if the teachers (in mainstream) were trained to better understand children with Asperger's Syndrome. However, when stakeholders were asked to identify whether they would prefer to modify the provision for the child they were involved with to be more like mainstream or more specialist, the modal direction of preferred change was for the status quo for every type of placement in the study.

The supports made available in the range of provisions Supports in mainstream primary schools.

The overall picture of the availability of supports for children with ASD in mainstream primary schools would appear to be one of considerable variability. Four main differences were found. In Case 1 there was an attempt to provide one- to-one support from an SEN auxiliary. In Case 2, there was no attempt to provide SEN auxiliary support.

In Case 2, there was clear evidence of both direct and indirect work from the speech and language therapist, with particular emphasis on a one-to-one assessment followed by an intervention in collaboration with teachers using a Circles of Friends approach. In Case 1, there was no input from speech and language therapist within the school context on either a direct or an indirect basis, and that this was reportedly at the expressed preference of the Head Teacher.

This may also have been indicative of a deeper divergence in school policy between the two mainstream primary schools in the study. In Case 2, the Head Teacher indicated that one of the main constraints on successful working with the child was reluctance on the part of the parents to give permission for the school and other professionals to discuss the child's difficulties openly and candidly with him and his peers. The Head Teacher in Case 1 spoke about her preference for normalising the child's school experience by reducing emphasis on his difficulties.

This was also influencing a divergence in attitudes between the two mainstream primary schools with regard to modification of the curriculum to emphasise communication and social skills. The school in Case 2 placed considerable emphasis on curriculum modification through Circle Time approaches and the Personal and Social Development programme. The school in Case 1, emphasised an approach which enabled the child to access small parts of the undifferentiated

mainstream curriculum including literacy and numeracy. The school, which adopted this latter approach, also noted a preference for supporting the child's social needs and self-esteem by sensitive support for his *own* social action in naturalistic classroom contexts.

# Supports in mainstream secondary school.

At the point of interview there was some evidence of a lack of clarity on the part of the mainstream secondary school in Case 1 about exactly what supports will be available him. There was, for example, some uncertainty about to what extent the school would be able to provide direct teacher-led learning support, or would rely on the alternative *Buddy* system, in which senior pupils provide one-to-one support and also go into mainstream classes to provide support. The secondary school teacher interviewed also spoke about the child joining a pre-existing dyspraxia support group, although the assessment rationale for this was not clear at the point of interview. However, the school did indicate a clear preference for the speech and language therapist to provide one-to-one direct work to the child as opposed to more consultative collaborative input with teachers. In contrast, the speech and language therapist expressed the view that a consultative collaborative approach was potentially more powerful and efficient in a mainstream secondary context.

There was good evidence to suggest that the secondary school placed considerable emphasis on the flow of information concerning the child from the Department of Learning Support within the school to mainstream classroom teachers, to enable individual teachers to make their own decisions about modification of the curriculum to emphasise communication and social skills.

## Supports in the primary communication support unit.

There was abundant evidence of close joint working between teachers in the primary communication support unit that provided a within-authority primary placement for the children in Cases 4 and 5 and the speech and language therapist who attended one half day per week. In this context, stakeholders described a mixed model format, which involved both direct assessment and intervention by speech and language therapist and also more collaborative working with teachers. The normal teacher-pupil ratio in this communication support unit was small at approximately one teacher to six children, which was further supported by SEN auxiliary input. The stakeholders indicated that modification of the curriculum to emphasise communication and social skills was fundamental to the work of the support unit and was given central focus through Individual Education Programmes (IEPs) and Personal and Social Development (PSD) activity.

It is particularly interesting that the specialist teacher in this primary communication unit noted that some children found being included in mainstream classes very difficult. For these children the teacher indicated that they tend to provide only locational integration, for example by supported contact with mainstream peers in the dining hall.

## Supports in the secondary communication support unit.

The stakeholders in the secondary communication support unit also operated the abovementioned mixed model of working with the speech and language therapist. The staffing ratio was even more favourable with one teacher to four pupils, which was also augmented by SEN auxiliary support. Like their counterparts in the primary communication support unit, stakeholders here, highlighted that modification of the curriculum to emphasise social and communication skills was of fundamental importance. The specialist teacher indicated that they seek to *introduce children to their disorder in order to help them to be comfortable with whom* they are. She noted that permission from parents to discuss the child's difficulties openly with them was an essential prerequisite for this approach. She also reported that, as a team, they were constantly seeking to develop a clear inclusion policy for children to go into the mainstream school to which the unit was attached, and that a large part of their work involved *public relations* work with mainstream teachers to make this happen.

## Supports in the secondary autism specific day school.

The autism specific secondary school, providing a day place for the child in Case 4, reported that it too operated the above-mentioned mixed model with the speech and language therapist who works from a permanent base within the school. The modification of the curriculum to emphasise communication and social skills was again highlighted as a core activity in the work of the school. The Head Teacher in this autism specific school reported that this was approached via an elaborated 5-14 curriculum designed for the specific needs of each child using an Individual Education Programme.

#### Supports in the secondary autism specific residential school.

The out-of-authority, autism specific residential secondary provision where the child in Case 5 was placed, reported that they have a resident speech and language therapist who works predominantly in an indirect way with teachers to devise individualised teaching strategies to help the child develop self regulatory abilities and also communication and social skills. The modification of the curriculum to emphasise communication and social skills was once again emphasised as a core activity in the work of the school. This was again achieved via an elaborated approach to the 5-14 curriculum. The school also noted that they place a particular emphasis on social skills via the Personal and Social Development curriculum.

Variability in the model of working used by speech and language therapy. It can be seen from the discussion above that notable variation was found between provision types with regard to how the speech and language therapist worked within the school. However, in the communication units attached to mainstream schools, a mixed model of working was reported.

Dockrell and Messer (1999) refer to a continuum of speech therapy intervention options that can range from highly structured didactic/behaviourist approaches to more naturalistic and child-oriented interventions, which more closely resemble natural child-parent interactions. It could be argued, therefore, that the speech and language therapist stakeholders in the study are showing an appropriate awareness of this continuum and are making use of the continuum in their negotiation of appropriate models of working with different teachers working with different children in different school contexts.

## A gradient of staffing ratios.

The discussion above also shows clear evidence of a gradient of support in terms of staffing levels, although this did not appear to follow the continuum of provision as closely as might have been expected. Teacher - child ratios of approximately 1 to 30 were found in mainstream primary and secondary schools; 1 to 6 in communication units associated with mainstream primary schools; 1 to 3 in communication unit associated with mainstream secondary schools; 1 to 4 in the within-authority day provision; and 1 to 6 in the out-of-authority autism specific residential provision. Somewhat surprisingly, therefore, it would appear that the best-staffed provision in terms of qualified teachers was the communication unit associated with a mainstream secondary school.

An interesting pattern also emerged with regard to the availability of SEN auxiliary support. A child in one mainstream primary had a full time SEN auxiliary while another had no SEN

auxiliary support of any kind. Looking at this in terms of adult to child ratios it would appear, therefore, that the disparity in different mainstream provisions is particularly large.

In the communication units associated with mainstream schools and also in the autism specific provisions, staffing ratios were also typically augmented by one SEN auxiliary per class, which was extended to two per class in the case of the out-of-authority autism specific residential provision. This gave an approximate ratio of one adult to two children in the most specialist provisions.

## Modification of the curriculum.

As might be expected, this general pattern of staffing levels seems to have had a very significant impact on what was possible in terms of small group work and modification of the curriculum to emphasise communication and social skills. In the case of mainstream primary and secondary schools where no SEN auxiliary support was provided this appeared to be limited and confined to what could be carried out within the school's normal learning support system. SEN support in one mainstream primary school led to greater curriculum differentiation and small group work. Where specialist teaching staff levels were considerably more favourable, there was unequivocal evidence to suggest that this enabled substantial modification of the 5-14 curriculum to emphasise communication and social skills, and that this then became central and fundamental to the work of the provision.

## Micro-level Approaches

A normalising approach to ASD. As mentioned earlier, the Head Teacher of the primary school in Case 1, somewhat controversially, had apparently played down the child's autistic difficulties, discouraged both direct and indirect input from the speech and language therapist and had emphasised the role of positive expectations that the child would access small components of the normal mainstream curriculum. The school's approach to these aspects of the child's needs was reportedly through sensitive awareness and support for the child's own abilities.

With regard to the forthcoming move to the mainstream secondary schools, the receiving secondary teachers indicated that it was difficult to predict what will work. However, the parents anticipated that continued emphasis on support being provided through the normal mechanisms of praise and encouragement would be effective. The psychologist expressed confidence in the ability of the normal system of learning support that already operates in the school to support the needs of the child with ASD after the school transfer.

# The Circles of Friends approach to including children with ASD.

In a particular mainstream primary, the most effective elements of provision were reported as one-to-one working and small group working focussing on social skills through Circles of Friends approach. However, the professional stakeholders shared the view that their ability to work with the child both within the context of the Circles of Friends intervention, and also more generally in mediating his interactions throughout the school, were greatly hampered by their inability to negotiate parental permission to discuss the child's difficulties openly with him. This perception is congruent with the finding of Ochs, Kremer-Sadlik, Solomon and Sirota (2001) that positive inclusion experiences were facilitated by sensitive disclosure to peers in order to increase awareness of the capabilities and impairments of children with ASD. They argue that this leads to giving autism more space in classrooms conversations, which in turn can enhance the perspective-taking skills and nurture the creative potential of all children to make mainstream classrooms more inclusive.

Outreach support and ecological models of inclusion of children with ASD.

The Head Teacher of a primary school in this study, where there were particular problems with the interpersonal relationship that developed between the child and the full time SEN auxiliary appointed for his support, emphasised that when relationships became particularly strained in school, outreach support was particularly helpful both to the school and the family. Sheppard (2000) notes that teachers may require additional advice to create a teaching environment that is accessible to a child with ASD. She suggests that an outreach support model can encourage stakeholders to locate the child's problems in the interactions between himself and his environment, rather than in the individual; thereby working on an ecological model.

## The need for liaison between specialist and mainstream teaching staff.

Following on from the particularly problematic primary placement for the child in Case 2 and looking forward to the planned placement in the secondary communication support unit, stakeholders emphasised that the factors most likely to work in the new context would include intensive support for social communication skills to enable him to access classes in the attached mainstream secondary school. The specialist teacher from the communication support unit described how this would require close liaison between the communication support base staff and the child's mainstream teachers in order to reduce potential sources of conflict and stress. She pointed out that the communication support unit had slowly managed to change the perceptions and practice of the mainstream teachers. However, she suggested that helping the child to manage potentially problematic relationships with a range of mainstream teachers and peers would continue to be challenging.

## The value of autism specific experience.

Stakeholder perceptions of what was perceived to be working and not working for the child in Case 4 are also potentially illuminating. In the context of the primary communication support unit, stakeholders emphasised the efficacy of teachers having a lot of autism specific experience. This enabled them to conduct individual assessment of the child to design an individual education programme that took account of the individual profile and personality of the child. It may be significant that in this particular context the parent, the teacher and the psychologist could not identify any aspect of the primary communication support unit which was not working.

## Specialist environments and contact with mainstream peers.

In Case 4, the factors which were emphasised by stakeholders as being likely to work in this new context included continuity of approach with the previous placement in the primary communication support unit with its continued emphasis on an individual approach within small groups.

However, it is interesting that the fact that the school does not have enough access to mainstream environments and normally developing peers was identified as a potentially negative factor. This comment however, must be viewed alongside another stakeholder view that exposing the child to large groups of children could be problematic. Jordan and Jones (1997) researching in a specifically Scottish context found significant differences between the communication units in the relative emphasis given to creating opportunities for contact with mainstream peers compared to providing a specialist environment to meet needs.

#### Discussion

The study examined the levels of support available in the different provisions on a range of dimensions including: speech and language therapy input; access to small group work; extra

teacher and SEN auxiliary input; and modification of the curriculum to emphasise communication and social skills. The results show that a continuum of different supports exist which reflects, and is clearly linked with, the continuum from mainstream schools, to communication units associated with mainstream schools, to stand alone autism specific schools. However, within this broad relationship there was also considerable evidence of variability in the supports made available within ostensibly similar types of school provision.

As mentioned earlier, Smith and Brown (2000) have argued that more could be done to create more autism friendly environments in any educational context provided a number of key elements are present. This is in sharp contrast to the view expressed by Mesibov & Shea (1996) who suggest there are insufficient foundations for empirically based decisions about the benefits of full inclusion for children with more challenging autistic difficulties.

The what works? question that formed this research now appears too simple. The first question should perhaps be What Is There? – what elements of a continuum of provision actually exist accessible to a specific location? The second question might be What Works in Theory? – but the research literature is hardly unequivocal in this respect. Most importantly (according to stakeholder feedback in this study) is What Works in Practice? – what is the quality of implementation of any particular intervention? This latter can be unpicked into macro and micro questions: Is the provision delivered reliably by appropriately qualified personnel in an appropriate environment? and Are the curriculum delivery methods and interactive behaviours of all relevant staff maximally effective for this child? Given the limited nature of the evidence base, the latter is likely to be an empirical question to be addressed by experimental teaching albeit informed by previous experience.

It is particularly striking that when stakeholders were asked if they would prefer to see the child they were involved with move either up the continuum of provision towards mainstream or down the continuum towards more specialist provision, most indicated that they would prefer to leave the child where he was. Of course, if you have spent considerable effort ensuring you obtained the placement you wanted for your child, dissonance alone might lead you to be satisfied with it. If you have not spent such effort, confirming the status quo at least avoids any feelings of guilt. Or perhaps everyone is just more comfortable with the status quo because at least it is the devil you know. Regardless of the theory, you are familiar with its strengths and weaknesses in actual practice; while the real effectiveness in practice of any new placement of any sort would have to be learned from the beginning.

Several parents expressed the view that there would be no need for secondary communication units if ordinary mainstream teachers were trained to have a better understanding of children with Asperger's Syndrome. This finding is congruent with the findings of Barnard, Prior and Potter (2000) from a national survey who report that the most desired changes expressed by parents was more training about autism to increase the teachers' knowledge and expertise.

It is possible to argue based on Bronfenbrenner's theory (1979), that interventions with a child with ASD should be designed as Mesosystems, which provide functional links between different Microsystems such as home, school and other agencies. The development of outreach services would, therefore, appear to offer substantial potential for the design and implementation of effective and practical collaborative and ecological intervention strategies.

#### Conclusion

It is important to make appropriate decisions about the educational provision for a child from the start as there is a tendency towards status quo. Parents seem to be of the view that whatever the educational provision, teachers should have adequate autism-specific training. If all teachers were trained in this way, parents see advantage in the child being in mainstream settings. However, this has to be decided on a case to case basis due to the diversity in the needs of each child. It is important for parents to have a range of options from specialist to mainstream. There is also a need for dialogue between parents and professionals to work out what's best for the child. More importantly, whatever the provision, the quality of delivery, staff attitude, curriculum modification, etc. play an important part in creating an *inclusive* environment.

Future research in this area can be improved by exploring the perceptions of children with ASD who are experiencing these different provisions. Longitudinal studies with larger samples will provide more insight into the various issues considered in this study. More research needs to be done on the curriculum delivery methods and interactive behaviours of all relevant staff.

## References

Barnard, J., Prior, A. & Potter, D. (2000). *Inclusion and autism: is it working?* London: The National Autistic Society.

Barton, L. (1988). The politics of special educational needs. London: Falmer Press.

Bronfenbrenner, U (1979). *The ecology of human development*. Cambridge, Mass: Harvard University Press.

De Jong, P. & Berg I. (2002). Interviewing for solutions. Pacific Grove, CA: Brooks/Cole.

Dockrell, J. & Messer, D. (1999). *Children's language and communication difficulties*. London: Cassell.

Farrell, P. (1997). The integration of children with severe learning difficulties: A review of recent literature. *Journal of Applied Research in Intellectual Disabilities*, 10, 1-14.

Feiler, A. & Gibson, H. (1999). Threats to the inclusive movement. *British Journal of Special Education*, 26, (3), 147-152.

Florian, L. (1998). An examination of the practical problems associated with the implementation of inclusive education policies. *Support for Learning*, 13, (3), 105-108

Hegarty, S. (1993). Reviewing the literature on integration. *European Journal of Special Needs Education*, 8, 194-200.

Hornby, G.(1999). Inclusion or delusion:can one size fit all? *Support for Learning*, 14, (4), 152-7. Jordan, R. & Jones, G. (1997). *Educational provision for children with autism in Scotland*. Interchange No.46. Edinburgh: Scottish Education and Employment Department.

Mesibov, G. & Shea, V. (1996). Full inclusion and students with autism. *Journal of Autism and Developmental Disorders*, 26, (3), 337-346.

Ochs, E., Kremer-Sadlik, T., Solomon, O. & Sirota, K. G. (2001). Inclusion as social practice: views of children with autism. *Social Development*, 10, (3), 399-419.

Sebba, J. & Ainscow, M. (1996). International developments in inclusive schooling: mapping the issues. *Cambridge Journal of Education*, 26, (1), 5-17.

Sheppard, S. (2000). Autism outreach services - influencing inclusive practice? *Educational and Child Psychology*, 17, (4) 17-29.

Skirtic, T. (1991). Behind special education: a critical analysis of professional culture and school organisation. Denver: Love Publishing.

Smith, E. & Brown, C. (2000). Creating an autism friendly environment. *Educational Psychology in Scotland*, 5, 3, 23-25.

Wagner, P. & Gillies, E. (2001). Consultation: a solution-focused approach. In Y. Ajmal & I. Rees (Eds.), *Solutions in schools*. London: BT Press.

Weber, R. (1990). Basic content analysis. Newbury Park, CA: Sage.